

OVERVIEW

The SCADALink IP100 firmware is field upgradeable and all released hardware versions are compatible with all available firmware versions. The IP100 firmware is packaged with the IP100 GUI Software and available for download at www.scadalink.com. The current firmware version installed can be determined by connecting to the IP100 with the GUI software and selecting "Info" from the "Device" menu. There are two primary methods of upgrading firmware in the IP100:

1. Online Bootloader:

Available in all firmware versions 3.X.X and above. The bootloader can be used to upgrade firmware locally via serial connection using the standard IP100 user cable supplied with the unit, or through serial connection to COM1 terminal blocks. The Firmware can also be loaded via Ethernet connection (remotely or locally). When upgrading with the bootloader all configuration parameters are retained through the upgrade.

2. Bootstrap Cable:

For devices currently running old firmware prior to version 3.0.0 (Sept. 2011) the bootstrap cable is required to upgrade the unit. This upgrade must be done locally through a RS232 port using the "IP100 Firmware Programming (bootstrap) cable". Note this cable has a different pin out than the supplied user cable and can be ordered from Bentek Systems if required. When upgrading firmware using the bootstrap cable all configuration parameters will be overwritten and should be saved prior to the upgrade process to be re-written after the upgrade is complete.

PROCEDURE

Upgrade using Online Bootloader:

If the unit to be upgraded is already running firmware version 3.X.X or above the online bootloader can be used to upgrade the unit.

1. Run the latest IP100 GUI software. The latest version can be downloaded from the IP100 product page on Bentek Systems' website www.scadalink.com.
2. Connect to the device using either Ethernet or Serial. ("Device>Connect")
3. Read the current configuration from the device by selecting "Device>Config>Read" and then save the current config by selecting "File>Save"
The Current configuration parameters will be retained during the upgrade process, however it is good practice to save a copy of the configuration as a backup.
4. Select "Load Firmware" from the "Device" Menu.
5. A popup window will appear with the firmware version to be loaded. This will default to the latest firmware file matching the current GUI software version. If you wish to load a different firmware file, click the folder icon and browse to where the file is saved.
6. Click OK. Wait for the firmware load to complete.

Upgrade using the Bootstrap Cable:

If the unit to be upgraded is running a firmware older than 3.0.0 (Sept. 2011) you will need to upgrade using the Bootstrap Cable. This upgrade will overwrite any existing configuration so it is imperative to read the configuration from the device before upgrading and write down the critical parameters such as IP address, serial port settings, and connection details.

1. Use the GUI software matching the currently installed firmware version to connect and read the current parameters from the device. Record the settings for re-programming after the upgrade.
2. Run the latest IP100 GUI software. The latest version can be downloaded from the IP100 product page on Bentek Systems' website www.scadalink.com. The GUI can be run from the portable (.zip) version and can then be run alongside the old version to compare configuration settings.
3. Plug in the "IP100 Firmware Programming Cable". All the LED's on the device will go off. You do not need to connect to the device in the GUI.
4. Select "Bootstrap Load" from the "Tools" menu.
5. A popup window will appear with the firmware version to be loaded. This will default to the latest firmware file matching the current GUI software version. If you wish to load a different firmware file, click the folder icon and browse to where the file is saved.
6. Select the serial Com port on the computer that is connected to the firmware programming cable.
7. Click OK. Wait for the firmware load to complete.
8. When done, unplug the programming cable and cycle power on the unit.
9. Connect to the device using the "IP100 Config Cable" or through COM 1 or Ethernet (default IP address is 192.168.0.110) and re-configure settings appropriately.